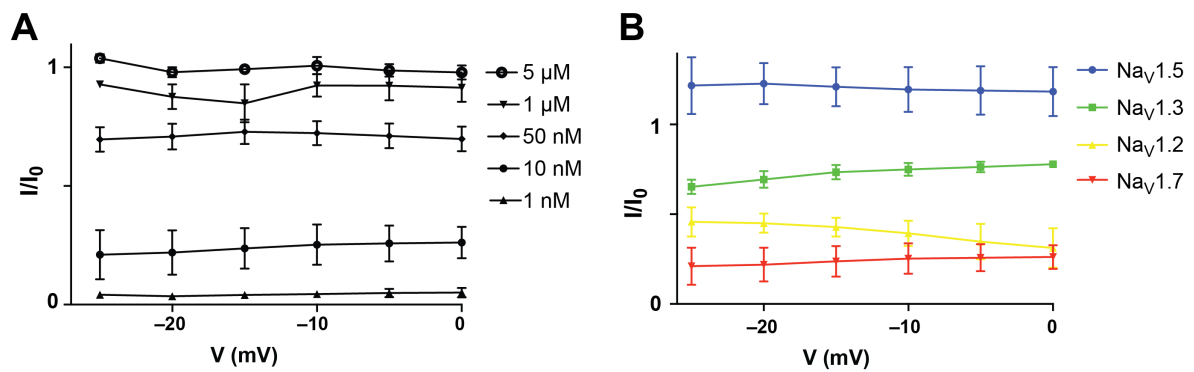


## Supporting Material

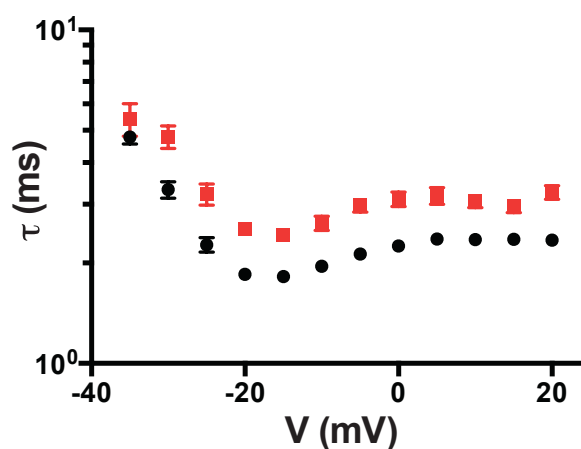
### Seven novel modulators of the analgesic target $\text{Na}_v1.7$ uncovered using a high-throughput venoms-based discovery approach

Supplementary Figure 1



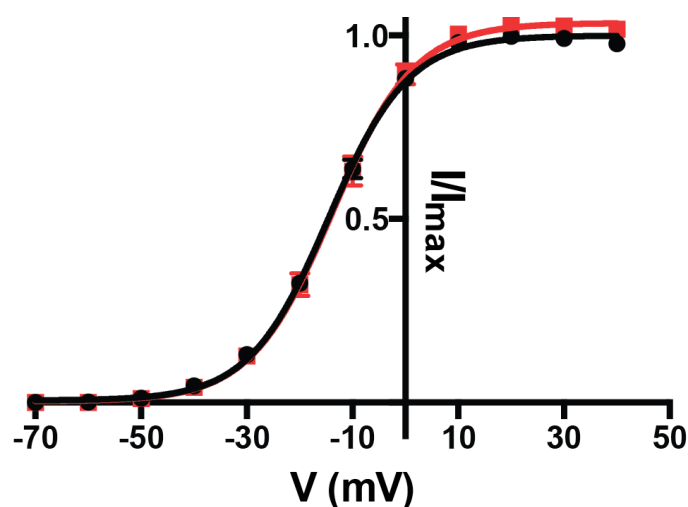
**Supplementary Figure 1. Voltage-dependence of  $\text{Na}_v$  channel inhibition by rHd1a.** (A) Inhibition of  $\text{Na}_v1.7$ -mediated currents by rHd1a is not voltage dependent from  $-25$  mV to  $0$  mV ( $n = 3-4$ ; error bars denote s.e.m.). Currents were evoked from a holding potential of  $-90$  mV, stepping from  $-70$  to  $0$  mV in  $5$ -mV increments. (B) Selectivity of rHd1a is not voltage-dependent from  $-25$  mV to  $0$  mV.  $I/I_0$  in the presence of  $1 \mu\text{M}$  rHd1a for  $\text{hNa}_v1.2$ ,  $\text{hNa}_v1.3$ ,  $\text{hNa}_v1.5$  and  $\text{hNa}_v1.7$  ( $n = 3-4$ ; error bars denote s.e.m.). Currents were evoked from a holding potential of  $-90$  mV, stepping from  $-70$  to  $0$  mV in  $5$ -mV increments.

### Supplementary Figure 2



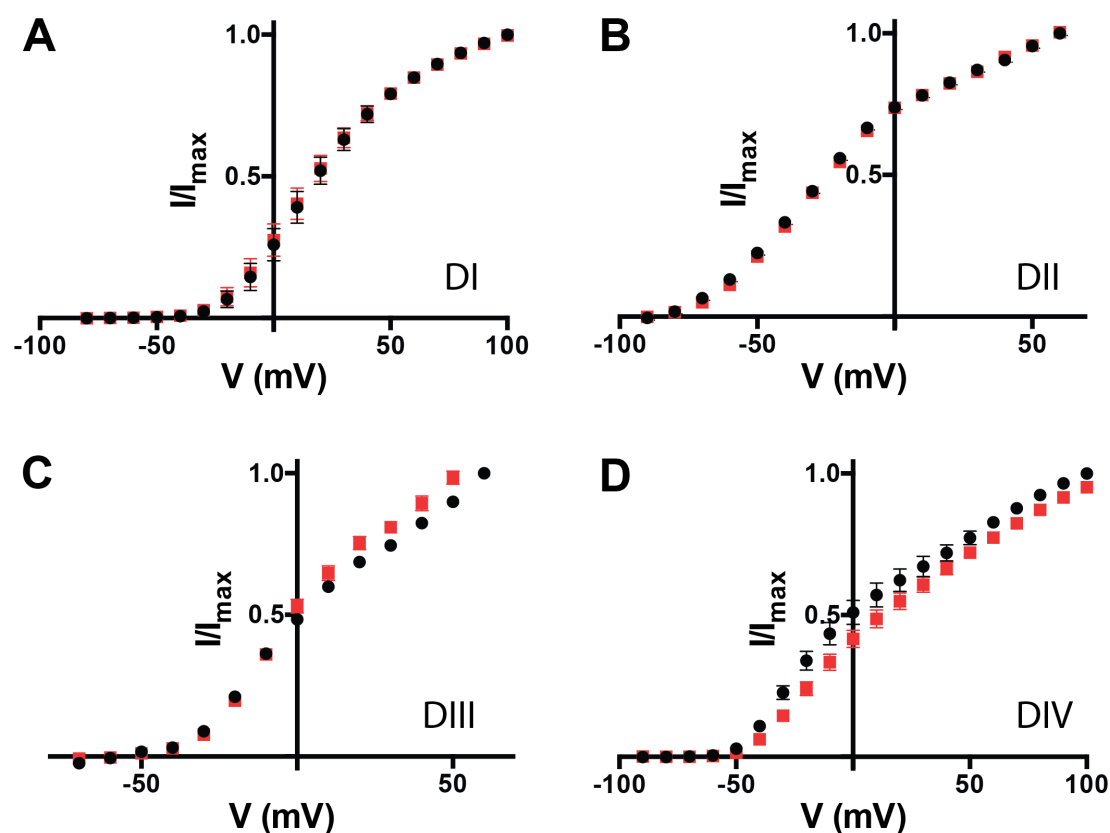
**Supplementary Figure 2. Effect of rHd1a on hNav1.7 inactivation time constants.** Time constant ( $\tau$ ) for inactivation of hNav1.7 in the absence (black) or presence (red) of 1  $\mu$ M rHd1a ( $n = 5-7$ ; error bars denote s.e.m). The rate of inactivation is slowed in the presence of rHd1a. Currents were evoked from a holding potential of  $-90$  mV, stepping from  $-70$  to  $+20$  mV in 5-mV increments.

**Supplementary Figure 3**



**Supplementary Figure 3. Effect of rHd1a on human ERG channels (hERG, Kv11.1).** The current–voltage ( $I$ – $V$ ) relationship for hERG was measured by applying 2-s pulses to test potentials ranging from  $-70$  to  $+40$  mV in 10-mV increments and then by a repolarizing step to  $-70$  mV for 1 s. Tail currents are plotted as a function of voltage and fitted to a Boltzmann equation ( $n = 6$ ; error bars denote s.e.m). There was no significant difference between control currents (black) and those following addition of 1  $\mu$ M rHd1a (red).

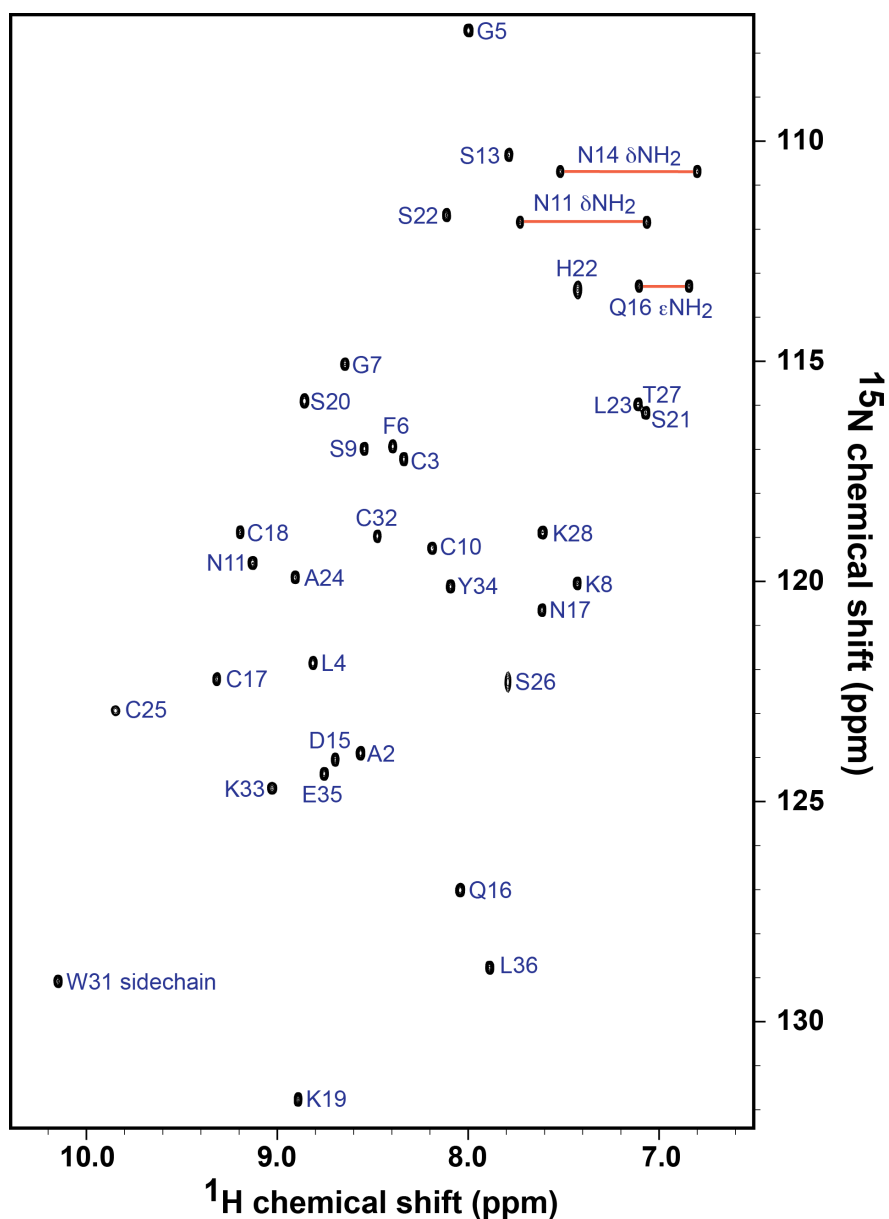
# Supplementary Figure 4



**Supplementary Figure 4. Effect of rHd1a on hNav1.9/rKv2.1 chimeras.** Tail current-voltage relationships for a panel of hNav1.9/rKv2.1 chimeras obtained before (black) or after (red) addition of 1  $\mu$ M rHd1a ( $n = 5-8$ ; error bars denote s.e.m.). These chimeras were constructed by transplanting the S3b-S4 paddle from each domain of hNav1.9 (DI, DII, DIII and DIV, as indicated) into rKv2.1; construction and characterisation of these chimeras was reported previously<sup>1</sup>. The holding voltage was  $-90$  mV (or  $-120$  mV for DII) and the tail voltage was  $-70$  mV for the DI (panel A),  $-90$  mV for DII (panel B),  $-60$  mV for DIII (panel C), and  $-80$  mV for DIV (panel D) chimeras. rHd1a had no effect on any of the chimeric channels.

1. Bosmans F, Puopolo M, Martin-Eauclaire MF, Bean BP, Swartz KJ (2011). Functional properties and toxin pharmacology of a dorsal root ganglion sodium channel viewed through its voltage sensors. *J. Gen. Physiol.* 138: 59–72.

Supplementary Figure 5



**Supplementary Figure 5. Fully assigned 2D  $^1\text{H}$ - $^{15}\text{N}$ -HSQC spectrum of Hd1a.** Horizontal lines connect peaks corresponding to the two sidechain NH groups of N11, N14, and Q16. The peak from the indole sidechain of W31 is also labelled. All other peaks are from backbone amide groups. The  $^1\text{H}$ - $^{15}\text{N}$ -HSQC spectrum is missing resonances from the backbone amide groups of K30 and W31, but they were present in 3D  $^{15}\text{N}$ - and  $^{13}\text{C}$ -edited HSQC-NOESY spectra.

**Supplementary Table 1:** List of species from which venom was obtained for this study.

Family	Genus	Species	Gender	Continent	hNav1.7 activity <sup>2</sup>
Araneidae	<i>Argiope</i>	<i>sp.</i> (Papua New Guinea <sup>1</sup> )	female	Asia	NA
Araneidae	<i>Cyrtophora</i>	<i>moluccensis</i>	female	Asia	NA
Araneidae	<i>Eriophora</i>	<i>transmarina</i>	female	Australia	NA
Atypidae	<i>Atypus</i>	<i>piceus</i>	female	Europe	Inhibitor
Austrochilidae	<i>Hickmania</i>	<i>troglydytes</i>	female	Australia	NA
Ctenidae	<i>Ancylometes</i>	<i>sp.</i> (Guatemala)	female	America	Inhibitor
Ctenidae	<i>Cupiennius</i>	<i>salei</i>	female	America	NA
Ctenidae	<i>Phoneutria</i>	<i>nigriventer</i>	female	America	Agonist
Desidae	<i>Badumna</i>	<i>insignis</i>	female	Australia	Inhibitor
Dipluridae	<i>Linothele</i>	<i>fallax</i>	female	America	NA
Hexathelidae	<i>Atrax</i>	<i>robustus</i>	female	Australia	NA
Hexathelidae	<i>Hadronyche</i>	<i>infensa</i>	female	Australia	Agonist
Hexathelidae	<i>Macrothele</i>	<i>gigas</i>	female	Asia	NA
Idiopidae	<i>Euoplos</i>	<i>sp.</i> (NSW, Australia)	female	Australia	Inhibitor
Lycosidae	<i>Allocosa</i>	<i>obscuroides</i>	female	Asia	NA
Lycosidae	Unidentified	<i>sp.</i> (QLD, Australia)	female	Australia	NA
Nemesiidae	<i>Acanthogonatus</i>	<i>francki</i>	female	America	NA
Nemesiidae	<i>Aname</i>	<i>sp.</i> (QLD, Australia)	female	Australia	NA
Nemesiidae	<i>Aname</i>	<i>sp.</i> (WA, Australia)	female	Australia	NA
Nephilidae	<i>Nephila</i>	<i>pilipes</i>	female	Asia	NA
Nephilidae	<i>Nephila</i>	<i>plumipes</i>	female	Australia	NA
Pisauridae	<i>Dolomedes</i>	<i>sp.</i> (QLD, Australia)	female	Australia	NA
Pisauridae	<i>Megadolomedes</i>	<i>australianus</i>	female	Australia	Inhibitor
Sparassidae	<i>Heteropoda</i>	<i>jugulans</i>	male	Australia	Inhibitor
Sparassidae	<i>Neosparassus</i>	<i>diana</i>	female	Australia	Inhibitor
Sparassidae	Unidentified	<i>sp.</i> 1 (Mission, Papua New Guinea)	male	Asia	Inhibitor
Sparassidae	Unidentified	<i>sp.</i> 2 (Fraser Island, QLD, Australia)	unknown	Australia	Inhibitor
Sparassidae	Unidentified	<i>sp.</i> 3 (Port Moresby, Papua New Guinea)	female	Asia	Inhibitor
Sparassidae	Unidentified	<i>sp.</i> 4 (Regency Downs, QLD, Australia)	female	Australia	Inhibitor
Sparassidae	Unidentified	<i>sp.</i> 5 (Gobe, Papua New Guinea)	female	Asia	Inhibitor
Sparassidae	Unidentified	<i>sp.</i> 6 (Gobe, Papua New Guinea)	female	Asia	Inhibitor
Theraphosidae	<i>Acanthoscurria</i>	<i>antillensis</i>	female	America	NA
Theraphosidae	<i>Acanthoscurria</i>	<i>geniculata</i>	male	America	NA
Theraphosidae	<i>Agnostopelma</i>	<i>tota</i>	female	America	NA
Theraphosidae	<i>Aphonopelma</i>	<i>seemanni</i>	male	America	Agonist
Theraphosidae	<i>Aphonopelma</i>	<i>sp.</i> (Vera Cruz, Mexico)	female	America	Agonist
Theraphosidae	<i>Aphonopelma</i>	<i>sp.</i> (Malinche, Mexico)	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>bicegoi</i>	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>diversipes</i>	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>minatrix</i>	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>purpurea</i>	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>sp.</i> (amazonica)	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>sp.</i> (Guyana)	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>urticans</i>	female	America	NA
Theraphosidae	<i>Avicularia</i>	<i>versicolor</i>	female	America	Inhibitor
Theraphosidae	<i>Bonnetina</i>	<i>tanzeri</i>	female	America	Inhibitor
Theraphosidae	<i>Brachypelma</i>	<i>albopilosum</i>	female	America	NA
Theraphosidae	<i>Brachypelma</i>	<i>annitha</i>	female	America	NA
Theraphosidae	<i>Brachypelma</i>	<i>boehmei</i>	female	America	Agonist
Theraphosidae	<i>Brachypelma</i>	<i>klaasi</i>	female	America	NA
Theraphosidae	<i>Brachypelma</i>	<i>sabulosum</i>	female	America	Agonist
Theraphosidae	<i>Brachypelma</i>	<i>schroederi</i>	female	America	Agonist
Theraphosidae	<i>Brachypelma</i>	<i>smithi</i>	female	America	NA

Family	Genus	Species	Gender	Continent	hNav1.7 activity <sup>2</sup>
Theraphosidae	<i>Brachypelma</i>	<i>vagans</i>	female	America	Agonist
Theraphosidae	<i>Ceratogyrus</i>	<i>brachycephalus</i>	female	Africa	Inhibitor
Theraphosidae	<i>Ceratogyrus</i>	<i>darlingi</i>	female	Africa	NA
Theraphosidae	<i>Ceratogyrus</i>	<i>marshalli</i>	female	Africa	Inhibitor
Theraphosidae	<i>Ceratogyrus</i>	<i>sanderi</i>	female	Africa	Inhibitor
Theraphosidae	<i>Chaetopelma</i>	<i>olivaceum</i>	female	Africa	Inhibitor
Theraphosidae	<i>Chilobrachys</i>	<i>dyscolus</i>	female	Asia	Agonist
Theraphosidae	<i>Chilobrachys</i>	<i>fimbriatus</i>	female	Asia	NA
Theraphosidae	<i>Chilobrachys</i>	<i>guangxiensis</i>	female	Asia	Agonist
Theraphosidae	<i>Chilobrachys</i>	<i>huahini</i>	female	Asia	NA
Theraphosidae	<i>Chilobrachys</i>	<i>sp.</i> (Malaysia)	female	Asia	NA
Theraphosidae	<i>Chromatopelma</i>	<i>cyaneopubescens</i>	female	America	Inhibitor
Theraphosidae	<i>Coremiocnemis</i>	<i>tropix</i>	female	Australia	Inhibitor
Theraphosidae	<i>Crassicrus</i>	<i>lamanai</i>	female	America	NA
Theraphosidae	<i>Cyclosternum</i>	<i>fasciatum</i>	female	America	Inhibitor
Theraphosidae	<i>Cyclosternum</i>	<i>sp.</i> (Boyaca, Colombia)	female	America	NA
Theraphosidae	<i>Cyclosternum</i>	<i>sp.</i> (Meta, Colombia)	female	America	NA
Theraphosidae	<i>Cyriapagopus</i>	<i>sp.</i> ("Sulawesi black")	female	Asia	NA
Theraphosidae	<i>Cyriapagopus</i>	<i>schioedtei</i>	female	Asia	Inhibitor
Theraphosidae	<i>Cyrtopholis</i>	<i>ramsi</i>	female	America	NA
Theraphosidae	<i>Encyocratella</i>	<i>olivacea</i>	male	Africa	Agonist
Theraphosidae	<i>Ephebopus</i>	<i>cyanognathus</i>	female	America	NA
Theraphosidae	<i>Ephebopus</i>	<i>murinus</i>	female	America	NA
Theraphosidae	<i>Ephebopus</i>	<i>rufescens</i>	female	America	NA
Theraphosidae	<i>Ephebopus</i>	<i>uatuman</i>	female	America	NA
Theraphosidae	<i>Euathlus</i>	<i>pulcherrimaklaasi</i>	female	America	Inhibitor
Theraphosidae	<i>Euathlus</i>	<i>sp.</i> ("green femur", Chile)	female	America	Inhibitor
Theraphosidae	<i>Euathlus</i>	<i>sp.</i> ("red", Chile)	female	America	Inhibitor
Theraphosidae	<i>Euathlus</i>	<i>truculentus</i>	female	America	NA
Theraphosidae	<i>Eucratoscelus</i>	<i>constrictus</i>	female	Africa	Inhibitor
Theraphosidae	<i>Eupalaestrus</i>	<i>campestratus</i>	female	America	Inhibitor
Theraphosidae	<i>Eupalaestrus</i>	<i>weijenberghi</i>	female	America	NA
Theraphosidae	<i>Grammostola</i>	<i>actaeon</i>	female	America	NA
Theraphosidae	<i>Grammostola</i>	<i>porteri</i>	female	America	Inhibitor
Theraphosidae	<i>Grammostola</i>	<i>pulchra</i>	female	America	Inhibitor
Theraphosidae	<i>Grammostola</i>	<i>pulchripes</i>	female	America	Inhibitor
Theraphosidae	<i>Grammostola</i>	<i>rosea</i>	female	America	Inhibitor
Theraphosidae	<i>Grammostola</i>	<i>sp.</i> ("Chile North")	female	America	Inhibitor
Theraphosidae	<i>Hapalopus</i>	<i>sp.</i> ("Colombia, large")	female	America	NA
Theraphosidae	<i>Haploclastus</i>	<i>nilgirus</i>	female	Asia	Agonist
Theraphosidae	<i>Haplopelma</i>	<i>albostriatum</i>	female	Asia	Inhibitor
Theraphosidae	<i>Haplopelma</i>	<i>doriae</i>	male	Asia	Inhibitor
Theraphosidae	<i>Haplopelma</i>	<i>lividum</i>	female	Asia	Inhibitor
Theraphosidae	<i>Haplopelma</i>	<i>minax</i>	female	Asia	Inhibitor
Theraphosidae	<i>Haplopelma</i>	<i>schmidtii</i>	female	Asia	Inhibitor
Theraphosidae	<i>Haplopelma</i>	<i>sp.</i> (Borneo)	female	Asia	NA
Theraphosidae	<i>Harpactira</i>	<i>cf. gigas</i>	male	Africa	Agonist
Theraphosidae	<i>Harpactira</i>	<i>guttata</i>	female	Africa	NA
Theraphosidae	<i>Heteroscodra</i>	<i>maculata</i>	female	Africa	Agonist
Theraphosidae	<i>Holothele</i>	<i>sp.</i> ("Meta", Colombia)	female	America	NA
Theraphosidae	<i>Holothele</i>	<i>sp.</i> ("Norte de Santander", Colombia)	female	America	NA
Theraphosidae	<i>Holothele</i>	<i>sp.</i> (Choroni, Venezuela)	female	America	Agonist
Theraphosidae	<i>Holothele</i>	<i>sp.</i> (Isla Margarita, Venezuela)	female	America	NA
Theraphosidae	<i>Holothele</i>	<i>sp.</i> (Peru)	female	America	Inhibitor
Theraphosidae	<i>Holothele</i>	<i>sp.</i> (Romerito, Venezuela)	female	America	NA
Theraphosidae	<i>Hysterocrates</i>	<i>ederi</i>	female	Africa	Inhibitor

Family	Genus	Species	Gender	Continent	hNav1.7 activity <sup>2</sup>
Theraphosidae	<i>Hysterochrates</i>	<i>hercules</i>	female	Africa	Inhibitor
Theraphosidae	<i>Hysterochrates</i>	<i>sp.</i> (Cameroon)	female	Africa	Inhibitor
Theraphosidae	<i>Hysterochrates</i>	<i>sp.</i> (Nigeria)	female	Africa	Inhibitor
Theraphosidae	<i>Hysterochrates</i>	<i>sp.</i> (West Cameroon)	female	Africa	Inhibitor
Theraphosidae	<i>Ischnocolus</i>	<i>valentinus</i>	female	Europe	NA
Theraphosidae	<i>Lampropelma</i>	<i>nigerrimum</i>	female	Asia	NA
Theraphosidae	<i>Lampropelma</i>	<i>violaceopes</i>	female	Asia	Inhibitor
Theraphosidae	<i>Lasiodora</i>	<i>difficilis</i>	female	America	NA
Theraphosidae	<i>Lasiodora</i>	<i>klugi</i>	female	America	NA
Theraphosidae	<i>Lasiodora</i>	<i>parahybana</i>	female	America	NA
Theraphosidae	<i>Megaphobema</i>	<i>robustum</i>	female	America	NA
Theraphosidae	<i>Metriopelma</i>	<i>familiare</i>	female	America	Inhibitor
Theraphosidae	<i>Metriopelma</i>	<i>sp.</i> (Venezuela)	female	America	Inhibitor
Theraphosidae	<i>Monocentropus</i>	<i>balfouri</i>	female	Africa	Inhibitor
Theraphosidae	<i>Monocentropus</i>	<i>lambertoni</i>	female	Africa	NA
Theraphosidae	<i>Nhandu</i>	<i>coloratovillosus</i>	female	America	NA
Theraphosidae	<i>Nhandu</i>	<i>tripepii</i>	female	America	Inhibitor
Theraphosidae	<i>Ornithoctonus</i>	<i>aureotibialis</i>	female	Asia	Inhibitor
Theraphosidae	<i>Ornithoctonus</i>	<i>sp.</i> (Koh Samui, Thailand)	female	Asia	Inhibitor
Theraphosidae	<i>Orphnaecus</i>	<i>pellitus</i>	female	Asia	Inhibitor
Theraphosidae	<i>Orphnaecus</i>	<i>sp.</i> ("treedweller", Philippines)	female	Asia	NA
Theraphosidae	<i>Orphnaecus</i>	<i>sp.</i> (Cebu, Philippines)	female	Asia	Inhibitor
Theraphosidae	<i>Orphnaecus</i>	<i>sp.</i> (Maanghit-Cave, Philippines)	female	Asia	Inhibitor
Theraphosidae	<i>Orphnaecus</i>	<i>sp.</i> (Mt. Combuon, Philippines)	female	Asia	NA
Theraphosidae	<i>Orphnaecus</i>	<i>sp.</i> (Sibaliw, Panay, Philippines)	female	Asia	Inhibitor
Theraphosidae	<i>Orphnaecus</i>	<i>sp.</i> (Sipalay, Philippines)	female	Asia	Inhibitor
Theraphosidae	<i>Pamphobeteus</i>	<i>antinous</i>	female	America	Inhibitor
Theraphosidae	<i>Pamphobeteus</i>	<i>fortis</i>	male	America	NA
Theraphosidae	<i>Pamphobeteus</i>	<i>nigricolor</i>	male	America	Inhibitor
Theraphosidae	<i>Pamphobeteus</i>	<i>sp.1</i> (Colombia)	female	America	NA
Theraphosidae	<i>Pamphobeteus</i>	<i>sp.2</i> (Colombia)	female	America	NA
Theraphosidae	<i>Paraphysa</i>	<i>parvula</i>	female	America	Inhibitor
Theraphosidae	<i>Phlogiellus</i>	<i>inermis</i>	female	Asia	Inhibitor
Theraphosidae	<i>Phormictopus</i>	<i>auratus</i>	female	America	Inhibitor
Theraphosidae	<i>Phormictopus</i>	<i>cancerides</i>	female	America	Inhibitor
Theraphosidae	<i>Phormictopus</i>	<i>cautus</i>	female	America	NA
Theraphosidae	<i>Phormictopus</i>	<i>cochleasvorax</i>	male	America	Inhibitor
Theraphosidae	<i>Phormingochilus</i>	<i>everetti</i>	female	Asia	Inhibitor
Theraphosidae	<i>Plesiopelma</i>	<i>longisternale</i>	female	America	Inhibitor
Theraphosidae	<i>Plesiopelma</i>	<i>sp.</i> (Bolivia)	female	America	NA
Theraphosidae	<i>Poecilotheria</i>	<i>fasciata</i>	female	Asia	Inhibitor
Theraphosidae	<i>Poecilotheria</i>	<i>formosa</i>	female	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>hanumavilasumica</i>	female	Asia	NA
Theraphosidae	<i>Poecilotheria</i>	<i>metallica</i>	female	Asia	Inhibitor
Theraphosidae	<i>Poecilotheria</i>	<i>miranda</i>	female	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>ornata</i>	female	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>regalis</i>	female	Asia	NA
Theraphosidae	<i>Poecilotheria</i>	<i>rufilata</i>	female	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>smithi</i>	female	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>striata</i>	female	Asia	NA
Theraphosidae	<i>Poecilotheria</i>	<i>subfusca</i>	female	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>tigrinawesseli</i>	male	Asia	Agonist
Theraphosidae	<i>Poecilotheria</i>	<i>vittata</i>	female	Asia	NA
Theraphosidae	<i>Psalmopoeus</i>	<i>cambridgei</i>	female	America	NA
Theraphosidae	<i>Psalmopoeus</i>	<i>irminia</i>	female	America	Inhibitor
Theraphosidae	<i>Psalmopoeus</i>	<i>langenbucheri</i>	female	America	NA



Family	Genus	Species	Gender	Continent	hNav1.7 activity <sup>2</sup>
Theraphosidae	<i>Psalmopoeus</i>	<i>pulcher</i>	female	America	Inhibitor
Theraphosidae	<i>Psalmopoeus</i>	<i>reduncus</i>	female	America	NA
Theraphosidae	<i>Pseudhapalopus</i>	<i>spinulopalpus</i>	male	America	NA
Theraphosidae	<i>Pterinochilus</i>	<i>chordatus</i>	female	Africa	Agonist
Theraphosidae	<i>Pterinochilus</i>	<i>lugardi</i>	female	Africa	Agonist
Theraphosidae	<i>Pterinochilus</i>	<i>murinus</i>	unknown	Africa	NA
Theraphosidae	<i>Pterinochilus</i>	<i>sp.</i> (Kenya)	female	Africa	Agonist
Theraphosidae	<i>Schismatothele</i>	<i>inflata</i>	female	America	NA
Theraphosidae	<i>Schismatothele</i>	<i>sp.</i> (Norte de Santander, Colombia)	female	America	NA
Theraphosidae	<i>Schismatothele</i>	<i>sp.</i> (Tachira, Venezuela)	female	America	NA
Theraphosidae	<i>Selenocosmia</i>	<i>arndsti</i>	female	Asia	NA
Theraphosidae	<i>Selenocosmia</i>	<i>crassipes</i>	female	Asia	Inhibitor
Theraphosidae	<i>Selenocosmia</i>	<i>effera</i>	female	Asia	Inhibitor
Theraphosidae	<i>Selenocosmia</i>	<i>javanensis sumatrana</i>	female	Asia	NA
Theraphosidae	<i>Selenocosmia</i>	<i>peerboomi</i>	female	Asia	Inhibitor
Theraphosidae	<i>Selenocosmia</i>	<i>sp.</i> (Borneo)	female	Asia	Inhibitor
Theraphosidae	<i>Selenocosmia</i>	<i>sp.</i> (Crocker Range, Malaysia)	female	Asia	Inhibitor
Theraphosidae	<i>Selenocosmia</i>	<i>sp.</i> (Malaysia)	female	Asia	NA
Theraphosidae	<i>Selenotholus</i>	<i>foelschei</i>	female	Australia	Inhibitor
Theraphosidae	<i>Selenotypus</i>	<i>plumipes</i>	female	Australia	Inhibitor
Theraphosidae	<i>Sericopelma</i>	<i>silvicola</i>	female	America	Agonist
Theraphosidae	<i>Sericopelma</i>	<i>sp.</i> 1 (Panama)	female	America	NA
Theraphosidae	<i>Sericopelma</i>	<i>sp.</i> 2 (Panama)	female	America	NA
Theraphosidae	<i>Sericopelma</i>	<i>sp.</i> 3 (Panama)	female	America	NA
Theraphosidae	<i>Sericopelma</i>	<i>sp.</i> 4 (Panama)	female	America	NA
Theraphosidae	<i>Sphaerobothria</i>	<i>hoffmanni</i>	female	America	NA
Theraphosidae	<i>Stichoplastoris</i>	<i>sp.</i> (Costa Rica)	female	America	Agonist
Theraphosidae	<i>Stromatopelma</i>	<i>calceatum</i>	female	Africa	NA
Theraphosidae	<i>Tapinauchenius</i>	<i>cupreus</i>	female	America	NA
Theraphosidae	<i>Tapinauchenius</i>	<i>elenae</i>	female	America	NA
Theraphosidae	<i>Tapinauchenius</i>	<i>gigas</i>	female	America	Inhibitor
Theraphosidae	<i>Tapinauchenius</i>	<i>plumipes</i>	female	America	Inhibitor
Theraphosidae	<i>Tapinauchenius</i>	<i>violaceus</i>	female	America	Inhibitor
Theraphosidae	<i>Theraphosa</i>	<i>apophysis</i>	female	America	Inhibitor
Theraphosidae	<i>Theraphosa</i>	<i>blondi</i>	female	America	Inhibitor
Theraphosidae	<i>Thrigmopoeus</i>	<i>truculentus</i>	female	Asia	Agonist
Theraphosidae	<i>Thrixopelma</i>	<i>pruriens</i>	female	America	Inhibitor
Theraphosidae	<i>Xenesthis</i>	<i>immanis</i>	male	America	Agonist
Theraphosidae	<i>Xenesthis</i>	<i>sp.</i> ('blue', Colombia)	female	America	NA
Theraphosidae	<i>Xenesthis</i>	<i>sp.</i> ('white', Colombia)	female	America	Agonist

<sup>1</sup>Information in parentheses refers to the collection site or the non-scientific name used in pet trade.

<sup>2</sup>Activity against hNav1.7 in the high-throughput FLIPR assay: venoms are defined as containing an inhibitor or agonist of hNav1.7, or being not active (NA) against this channel.